

A Psychometric Evaluation of the Injury/Illness Sensitivity Index

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INTRODUCTION

- ▶ Injury/illness sensitivity, as measured by the 11-item Injury/Illness Sensitivity Index (ISI), is one of three factorially distinct (Taylor, 1993) fundamental fears. The others are anxiety sensitivity, measured by the Anxiety Sensitivity Index (ASI; Reiss & McNally, 1985) and fear of negative evaluation, measured by the Fear of Negative Evaluation Scale (FNE; Leary, 1983).
- ▶ The Injury/illness Sensitivity is believed to contribute substantially to anxiety-related Psychopathologies (Reiss, 1991). The purpose of the present study was to assess its factor structure and psychometric properties.

METHOD

- ▶ Participants were 122 individuals (mean age = 38.8, SD = 15.0; 51.6% female) who completed the ISI (see Table 1) and the ASI administered as part of a larger study.
- ▶ A principle components analysis (PCA) with applied parallel analysis (Horn, 1965; Longman, Cota, Holden, & Fekken, 1989) was conducted using mean eigenvalues and 95th percentile eigenvalues.
- ▶ An analysis of convergent and discriminant validity, following the recommendations of Steiger (1980), tested the significance of differences between correlations.

RESULTS

- ▶ The PCA resulted in a two-factor solution, accounting for 61.9% of the variance (Kaiser's = 0.83; $S-B^2(55) = 736.29$, $p < .001$). The two factor solutions is shown in Table 2. Simple structure was good, with no hyperplane items and no salient cross-loadings. The solution stability was good, with both factors having four or more variables with loadings $> .60$.
- ▶ A second PCA (Kaiser's = 0.50; $S-B^2(1) = 31.59$, $p < .001$) supported a single higher-order factor. This factor accounted for 74.3% of the lower order factor variance, with good simple structure (salient loadings of 0.86 for both lower-order factors).
- ▶ The ISI and all sub components possessed excellent reliability: Fear of Illness subscale (7 items; = 0.86), Fear of Injury subscale (4 items; = 0.84), and the ISI total (11 items; = 0.89).
- ▶ Analyses indicated that the ISI subscales possess satisfactory convergent and discriminant validity.

DISCUSSION

- ▶ The results indicate fears of injury and illness are related, but factorially distinct, loading onto a more general overarching fear of physical harm (rather than illness/injury sensitivity).
- ▶ A larger analysis of the ISI, possibly with revisions, is warranted. Such an analysis may further inform our understanding of somatic-specific anxiety pathologies; for example, the maintenance and exacerbation of chronic health conditions characterized by fear and avoidance.

Table 1. Injury/Illness Sensitivity Index (ISI)

Item	Description
ISI-01	I am frightened of being injured.
ISI-02	The thought of injury terrifies me.
ISI-03	I worry about becoming physically ill.
ISI-04	The thought of physical illness scares me.
ISI-05	I worry about being injured.
ISI-06	I worry that I might get a serious physical illness in the future.
ISI-07*	It would be awful to be injured in any way.
ISI-08*	It would be awful to have a serious physical illness.
ISI-09	I worry about my physical health.
ISI-10	I get scared if I think I am coming down with an illness.
ISI-11	I can't stand the thought of being injured.

Table 2. Two-factor solution: Loading, factor labels, and communalities.

Item	Fear of Illness	Fear of Injury	Communalities
ISI-06	0.849	0.031	0.685
ISI-09	0.816	-0.091	0.747
ISI-10	0.815	-0.164	0.330
ISI-03	0.682	0.243	0.787
ISI-08	0.668	0.073	0.666
ISI-04	0.605	0.315	0.769
ISI-07†	0.400	0.262	0.651
ISI-01	-0.109	0.935	0.499
ISI-02	-0.059	0.904	0.601
ISI-05	0.197	0.702	0.562
ISI-11	0.189	0.605	0.514

Note: Salient loadings are 0.400